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UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE

**FOOD
COMPOSITION
DATA**

FOOD COMPOSITION DATA

STANDARDS OF COMPLIANCE (specify Standard, if any, by number and cite sources and date)

20. FEDERAL STANDARDS OF IDENTITY	21. MILITARY SPECIFICATIONS	22. FEDERAL PURCHASE SPECIFICATIONS
23. STATE OR PROVINCE STANDARD (if diff. from federal)	24. OTHER (including company specifications)	

25. CHECKLIST OF PRODUCT AND PROCESSING VARIABLES (*check all applicable*)

<p>A. TREATMENT APPLIED</p> <p><input type="checkbox"/> Aged <input type="checkbox"/> Blanched (<i>specify method</i>):</p> <p><input type="checkbox"/> Bleached <input type="checkbox"/> Cured <input type="checkbox"/> Defatted <input type="checkbox"/> Partially defatted <input type="checkbox"/> Degermed <input type="checkbox"/> Homogenized <input type="checkbox"/> Hydrogenated <input type="checkbox"/> Nutrients added <input type="checkbox"/> Nutritive sweetener added <input type="checkbox"/> Non-nutritive sweetener added <input type="checkbox"/> Phosphate <input type="checkbox"/> Pickled <input type="checkbox"/> Ripened <input type="checkbox"/> Salted <input type="checkbox"/> Sulfured <input type="checkbox"/> Winterized <input type="checkbox"/> Other (<i>describe</i>):</p> <p>B. PRESERVING TECHNIQUE</p> <p><input type="checkbox"/> None Commercially processed <input type="checkbox"/> Bottled <input type="checkbox"/> Canned <input type="checkbox"/> Dehydrated <input type="checkbox"/> Dehydro-frozen <input type="checkbox"/> Frozen <input type="checkbox"/> Pasteurized <input type="checkbox"/> Refrigerated <input type="checkbox"/> Smoked <input type="checkbox"/> Other (<i>describe</i>):</p> <p>Home processed <input type="checkbox"/> Canned <input type="checkbox"/> Dried <input type="checkbox"/> Frozen <input type="checkbox"/> Other (<i>describe</i>):</p> <p><input type="checkbox"/> Other (<i>describe</i>):</p>	<p>C. PROCESSING TECHNIQUE</p> <p>Canning Method <input type="checkbox"/> Acidified heat processed <input type="checkbox"/> Aseptic <input type="checkbox"/> Continuous agitating retort <input type="checkbox"/> Discontinuous agitating retort <input type="checkbox"/> Flame sterilizer <input type="checkbox"/> Hot-fill-hold <input type="checkbox"/> Hydrostatic retort <input type="checkbox"/> Still retort <input type="checkbox"/> Other (<i>describe</i>):</p> <p>Type of Pack <input type="checkbox"/> Juice <input type="checkbox"/> Light syrup <input type="checkbox"/> Heavy syrup <input type="checkbox"/> Extra heavy syrup <input type="checkbox"/> Oil <input type="checkbox"/> Vacuum <input type="checkbox"/> Water <input type="checkbox"/> Dietetic (<i>explain</i>):</p> <p><input type="checkbox"/> Other (<i>describe</i>):</p> <p>Dehydration <input type="checkbox"/> Air convection <input type="checkbox"/> Drum <input type="checkbox"/> Freeze-dried <input type="checkbox"/> Puff <input type="checkbox"/> Spray <input type="checkbox"/> Sun dried <input type="checkbox"/> Vacuum <input type="checkbox"/> Other (<i>describe</i>):</p> <p>Freezing <input type="checkbox"/> Forced air <input type="checkbox"/> Still air <input type="checkbox"/> Contact – plate freezing <input type="checkbox"/> Immersion (<i>specify medium</i>):</p> <p><input type="checkbox"/> Other (<i>describe</i>):</p>	<p>Milling or Refining</p> <p><input type="checkbox"/> Air classified <input type="checkbox"/> Bolted <input type="checkbox"/> Conditioned <input type="checkbox"/> Dry milled <input type="checkbox"/> Wet milled <input type="checkbox"/> Roller milled <input type="checkbox"/> Stone milled <input type="checkbox"/> Extraction rate (<i>describe</i>):</p> <p><input type="checkbox"/> Pearled <input type="checkbox"/> Purified (<i>explain</i>):</p> <p><input type="checkbox"/> Resifted (<i>explain</i>):</p> <p><input type="checkbox"/> Screw-pressed <input type="checkbox"/> Solvent-extracted <input type="checkbox"/> Tempered <input type="checkbox"/> Whole ground For wheat <input type="checkbox"/> Durum <input type="checkbox"/> Hard <input type="checkbox"/> Soft <input type="checkbox"/> Other (<i>specify</i>):</p> <p>D. COOKING METHOD</p> <p><input type="checkbox"/> No cooking Cooked by conventional methods Without added water or fat <input type="checkbox"/> Baked <input type="checkbox"/> Partially baked <input type="checkbox"/> Broiled <input type="checkbox"/> Browned <input type="checkbox"/> Heated <input type="checkbox"/> Popped <input type="checkbox"/> Roasted <input type="checkbox"/> Toasted <input type="checkbox"/> Other (<i>describe</i>):</p>	<p>With water, steam <input type="checkbox"/> Boiled <input type="checkbox"/> Parboiled <input type="checkbox"/> Braised <input type="checkbox"/> Poached <input type="checkbox"/> Precooked <input type="checkbox"/> Simmered <input type="checkbox"/> Steamed <input type="checkbox"/> Steamed with pressure <input type="checkbox"/> Stewed <input type="checkbox"/> Other (<i>describe</i>):</p> <p>With added fat or fat from item <input type="checkbox"/> Deep fat fried <input type="checkbox"/> Oven fried <input type="checkbox"/> Pan fried <input type="checkbox"/> Other (<i>describe</i>):</p> <p>With other ingredients <input type="checkbox"/> Breaded <input type="checkbox"/> Candied <input type="checkbox"/> Creole <input type="checkbox"/> Scalloped with cheese <input type="checkbox"/> Other (<i>describe</i>):</p> <p><input type="checkbox"/> Other conventional method (<i>describe</i>):</p> <p><input type="checkbox"/> Cooked by microwave (<i>Give details</i>):</p>
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25. CHECKLIST OF PRODUCT AND PROCESSING VARIABLES – CONTINUED (check all applicable)

E. PHYSICAL STATE

- Chips
- Cut
- Cubed
- Diced
- Flakes
- French Cut
- Granulated
- Ground
- Milled
- Minced
- Mashed
- Pieces
- Powdered
- Puffed
- Sections
- Shredded
- Sliced
- Split
- Sticks
- Wedges
- Whole
- Concentrated
- Condensed
- Evaporated
- Fluid
- Juice
- Paste
- Puree
- Rehydrated
- Diluted – with water (amount specified on container)
- Diluted – with milk (amount specified on container)
- Batter
- Dough
- Ready-to-heat-and-eat
- Baby food – strained
- Baby food – junior
- Other (describe):

F. DESIGNATION OF PORTION ANALYZED

Grain, Fruit, Vegetable and Other Groups of Plant Origin

- Heads
- Leaves
- Leaves – with stems
- Stems
- Pulp – with skin
- Pulp – with skin and seeds
- Pulp – with seeds w/o skin
- Juice – strained
- Juice – not strained
- Nectar
- Peel
- Pod – with seeds
- Pod – without seeds
- Seeds
- Kernels – with skin
- Kernels – without skin
- Other (describe):

Dairy, Meat, Fish and Other Groups of Animal Origin
(check all applicable in each column)

GROUP	PART OR CUT	DESCRIPTION
<input type="checkbox"/> Beef	<input type="checkbox"/> Breast	<input type="checkbox"/> Whole fish
<input type="checkbox"/> Chicken	<input type="checkbox"/> Chuck	<input type="checkbox"/> Whole cut
<input type="checkbox"/> Eggs	<input type="checkbox"/> Drumstick	<input type="checkbox"/> Light meat
<input type="checkbox"/> Fish (specify kind):	<input type="checkbox"/> Eggs – whole	<input type="checkbox"/> Dark meat
	<input type="checkbox"/> Egg whites	<input type="checkbox"/> Bone removed
	<input type="checkbox"/> Egg yolks	<input type="checkbox"/> Shell removed
<input type="checkbox"/> Lamb	<input type="checkbox"/> Fillet	<input type="checkbox"/> Separable fat
<input type="checkbox"/> Mutton	<input type="checkbox"/> Ham	<input type="checkbox"/> Separable lean
<input type="checkbox"/> Pork – fresh	<input type="checkbox"/> Heart	<input type="checkbox"/> Skin
<input type="checkbox"/> Pork – cured	<input type="checkbox"/> Gizzard	<input type="checkbox"/> Skin removed
<input type="checkbox"/> Shellfish (specify kind):	<input type="checkbox"/> Leg	<input type="checkbox"/> Specially trimmed (describe):
	<input type="checkbox"/> Liver	<input type="checkbox"/> Solids – with bone and liquid
<input type="checkbox"/> Turkey	<input type="checkbox"/> Rib	<input type="checkbox"/> Drained solids – with bone
<input type="checkbox"/> Veal	<input type="checkbox"/> Roe	<input type="checkbox"/> Solids and liquids
<input type="checkbox"/> Other (specify):	<input type="checkbox"/> Shoulders	<input type="checkbox"/> Drained solids
	<input type="checkbox"/> Tongue	<input type="checkbox"/> Drained liquid
	<input type="checkbox"/> Other (specify):	<input type="checkbox"/> Other (describe):

I. COMMENTS

G. PACKAGING (specify size of container by weight or volume of contents)

- All metal –
- Fiberboard –
- Flexible foil laminate –
- Glass –
- Paper bag –
- Plastic –
- Plastic boil-in-bag –
- Pressurized metal container –
- Metal container –
- Other (describe):

H. CLASS, GRADE, VARIETY, SPECIES (specify):

DETAILED VERBAL DESCRIPTION OF SAMPLE

(Include when applicable and if known information on factors and conditions such as suggested below.)

26. AGRICULTURAL PRODUCTION: Breed; Sex; Feeding practices of animals; Age; Area of country or location where produced; Variety, Maturity; Degree of ripeness; Time or season of year produced; Fertilization; Other growing conditions.

27. HANDLING AND MANUFACTURING PROCESSES: Treatment and time interval from harvest to beginning of processing; Kind and degree of refinement; Parts removed; Type and method of processing; Treatments as lye dip, type of blanching, use of antioxidants; Form prepared for distribution; Type and size of packing; Conditions and length of storage.

28. SAMPLING: Samples reported (check): Composites Individual Samples. Describe the "total" that was sampled and how sampling was conducted.

29. If samples reported herein were analyzed as part of a plan to measure EFFECT of specified condition(s) (e.g. studies on extent of milling, length and/or condition of storage, kind or degree of processing, other variables), give details. If data being reported herein are part of a continuing study, please give below location and information about additional data.

Mfg. Prod. No.

Date

Type of Analysis

Details of Study (Indicate matching of samples to determine effect(s) measured.)

* Measurement needed for nutrient labeling regulations.

1/ If water in any form — i.e., brine, steam, other — has been added, indicate on line 201, column B.

2/ In column P state conditions, as time, temperature, for determining total solids. If other determinations as anhydrous citric acid, water-insoluble solids, or soluble solids were made, make appropriate entries under Addendum.

3/ Excluding nitrate/nitrite. If N is from several ingredients, specify in column P approximate portion of total N from foods of (1) Gelatin; (2) Other animal sources; (3) Cereals; (4) Other plant sources; (5) Other (specify) sources as yeast, amino acids. If N in addition to that measured by Kjeldahl is determined, enter data under Argentum.

4/ Calculate protein from nitrogen using factors from Table 8, page 161 of AH No. 8. For chocolate and cocoa use total N \times 4.7 but calculate carbohydrate by difference using total N \times 5.63. Calculate protein in mushrooms as 2/3 N \times 6.25; yeast as 4/5 N \times 6.25; coffee as negligible. Enter factor used in blank.

5/ The figure for Total Carbohydrate (by difference) includes fiber.

⑥ In column B specify added salt (NaCl), seasoning et cetera other than added carbohydrate sweeteners; in column P specify approximate amounts of added salt, seasonings et cetera in 100 grams of product. Specify individual salt, sugar and.

CONTENT PER 100 GRAMS OF FOOD

If data as shown measure **EFFECT** of a variable (e.g. lot sampled before and again after storage), give details on a separate sheet and attach here.

CITATION TO METHODS OF SAMPLE PREPARATION AND ANALYSIS EMPLOYED	SUPPLEMENTARY INFORMATION
O	P

7/ Compute calories with factors from columns D, G, J on page 160 of AH No. 8, or 4, 7, 10 on page 25 of AH No. 74 (rev. 1973) for grams of protein, fat, carbohydrate; apply 6.93 to grams of alcohol and factor for glucose (3.68) to sorbitol. List and include information for alcohol, sorbitol under Addendum. Enter calorie factors used in column C.

8/ Determine and report weight in grams and dimensions in cm. or mm. or volume in ml. of specified portion of the product analyzed. In column P express the measure or unit in consumer terms such as 1 cup. If product is composed of two or more parts that are edible, describe or specify parts in column P and state proportions by weight of each part. Enter unit of measure used for line 217 under column D.

2/ Describe in column P any inedible part or parts present that were included in the weight of the portion weighed.

10/ Enter data for additional measurements here, including specific sugars not listed above; sorbitol, groups of carbohydrate, such as reducing sugars; non-nutritive components, such as pectin; organic acids; alcohol.

1/ Specify source(s) and approximate amounts of each mineral element or fat-soluble vitamin contributed and included as part of the total figures shown in columns D through M.

2/ Give details in column O if National Bureau of Standards or other certified sample was analyzed at the same time.

3/ Specify under Addendum additional forms determined that are not listed and enter data.

CONTENT PER 100 GRAMS OF FOOD

1/ Specify source(s) and approximate amount of each vitamin contributed and included as part of the total figures shown in column D through M.

2/ If dehydro form has not been determined because it has previously been found to be negligible, state "not applicable" in column O.

3/ Report on the basis of thiamin chloride hydrochloride [$C_{12}H_{17}CIN_4OS \cdot HCl$].

4) If amino acid, tryptophan, is determined, report data and details of analysis on line 501. Calculate niacin equivalent from tryptophan by dividing milligrams of tryptophan by 60. Record results on line 407, this page.

5. If tryptophan is not determined directly, calculate tryptophan using content of nitrogen, line 202, and either (1) the tryptophan values per gram of nitrogen from table 1 of Home Economics Research Report No. 4 "Amino Acid Content of Foods;" or (2) the tryptophan values of 90 mg per gram of nitrogen for milk and eggs, 75 mg per gram of nitrogen for meat and fish, and 60 mg

CONTENT PER 100 GRAMS OF FOOD

If data as shown measure EFFECT of a variable (e.g. lot sampled before and again after storage), give details on a separate sheet and attach here.

CITATION TO METHODS OF SAMPLE PREPARATION AND ANALYSIS EMPLOYED	SUPPLEMENTARY INFORMATION
N	O

per gram of nitrogen for cereals and legumes. State in column O which alternative was used. To obtain niacin equivalents, divide calculated values for milligrams of tryptophan by 60. Enter figures on line 408.

6/ Report as pantothenic acid, correcting if need be for calcium in calcium pantothenate.

7/ Enter data on line 414 only if data are available for all three components and shown on line 411, 412, and 413.

8/ Enter data on line 415 from method for determination of total vitamin B₆ only.

1/ Data for total amount of each amino acid present are to be reported. Do not report data for either free amino acids or available amino acids.

2/ Specify source(s) and approximate amount of each amino acid contributed and included as part of the total figures shown in columns D through M.

CONTENT PER 100 GRAMS OF FOOD

If data as shown measure EFFECT of a variable (e.g. lot sampled before and again after storage), give details on a separate sheet and attach here.

CODE NO. ASSIGNED TO
COMPANY/INSTITUTION

FOOD CODE (CFEI)

LIPIDS 1/ 2/

PRINCIPAL ADDED
SOURCES OF LIPIDS 3/

601 Cholesterol 2/

A

602 Total Glycerides

B

603 Phospholipids

C

604 Glycolipids

D

605 Total trans fatty acids

E

Fatty acids (as acids): 3/

F

606 Saturated: 4/

G

607 Butyric 4:0

H

608 Caproic 6:0

A

609 Caprylic 8:0

B

610 Capric 10:0

C

611 Lauric 12:0

D

612 Myristic 14:0

E

613 Palmitic 16:0

F

614 Stearic 18:0

G

615 Arachidic 20:0

H

616 Unsaturated: 4/

A

617 Oleic 18:1

B

618 Linoleic 18:2 2/ 5/

C

619 Linolenic 18:3 2/ 5/

D

620 Arachidonic 20:4

E

621 Docosahexanoic 22:6

F

Data for Food Labeling (as triglycerides): 6/

622 Polyunsaturated

G

623 Saturated

H

624 Addendum

UNIT OF
MEASUREMENT

DATA ON EDIBLE PART OF PRODUCT:

MO./DAY/YR.	MO./DAY/YR.	MO./DAY/YR.	MO./DAY/YR.	MO./DAY/YR.
MFG. PROD. NO.				
1	2	3	4	5
D	E	F	G	H

1/ Data requested are for total amounts, e.g. total amount of cholesterol or total amount of each fatty acid per 100 grams of food. Do not report data if a portion of the particular lipid occurs in bound form and only the free form has been determined.

2/ Under Addendum, list and enter data on content in 100 grams of food for other lipids determined, e.g. other sterols, total unsaponifiable matter, fatty acids such as 22:0, 16:1, 20:1, 22:1, 24:1, total 18:2, total 18:3, 20:5, 22:5 and others not already listed, including positional and geometric isomers.

